



## Mono® NOV Spells Reliability at Beverley WWTW

Yorkshire Water reports that eight Mono industrial progressing cavity pumps fitted on the auto desludge process at Beverley WwTW have just completed eighteen months of trouble-free operation following their installation. The pumps replaced a competitor's products, which had to be removed after they had suffered constant blockages and unreliable service.

Two Mono pc pumps are fitted to each of the four primary settlement tanks at Beverley WwTW as part of the framework agreement with Yorkshire Water, and were specified with minimum maintenance requirements and low whole of life costs uppermost in mind. The competitor's pumps had only been in operation for approx 1 year before Yorkshire Water had to resort back to manual desludging of the tanks because of constant blockages and this was proving to be cost prohibitive.

The pumps draw sludge from the bottom of the sludge hopper under the head of water in the primary tanks and transfer it to the sludge wet well. The previous equipment was situated in a confined place below ground, which proved inconvenient given the levels of maintenance subsequently required. The Mono pumps are situated above ground to improve access if required, although in the event they have not suffered a single blockage in the first year and a half of operation.

The primary sludge has a dry solids concentration of 3 – 8% and all the eight pumps have a transfer rate of 15m<sup>3</sup>/h. Powered by 3kW motors, the pumps internal fluid velocities are designed to be kept within operating limits to guarantee a long and relatively trouble free life.

Other characteristics which demonstrate Yorkshire Water's far sighted approach to lowering fixed costs and controlling long term budgets is the decision to have the pumps fitted with mechanical seals, rather than packed glands and to be equipped with overpressure and dry run protection systems.

Commenting on Yorkshire Water's experience of the Mono pumps at Beverley WwTW, Area Operations Supervisor David Sutton said, "The Mono equipment is trouble-free in operation and has significantly reduced the levels of maintenance required. On this basis it entirely justifies the decision to purchase equipment with a higher specification because it gives us a lower cost of ownership."

Mono Pumps are designed to give least whole life costs through component life, reliability of operation and ease of maintainability. Rotor and stator materials are selected and coated according to the end users industry to ensure that the type of wear likely to take place is accounted for and the best combination of materials is supplied. Differential pressure per rotor stage is kept to a minimum. This reduces the load at the rotor/stator seal line and consequently reduces wear.

Product Type: **8 industrial progressing cavity pumps**

Product: **Primary sludge  
(3%-8% D.S.)**

Capacity: **15m<sup>3</sup>/h**

Drive: **1.5 kW motor**



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**Mono® NOV**

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